CLAIMS

What is claimed is:

1. A system for moving a camera in space comprising:

a track having two spaced-parallel rails each rail having two upward-extending spaced-parallel lips; and

a dolly holding the camera and riding upon both rails of the track, the dolly having wheels that contact only, and that ride upon, the upward-extending spaced-parallel lips of the rails.

2. The system according to claim 1 wherein each rail of the track comprises:

a substantially planar elongate element shaped in the substantial contour of an external surface of one-half of an elongate prism, with opposite side edges of the element transverse to its elongate axis constituting the upward-extending spaced-parallel lips.

3. The system according to claim 2 wherein the track's rail's element comprises:

one-half of a tube, said tube being a substantially planar elongate sheet shaped in the substantial contour of the external surface of one-half of an elongate cylinder.

4. The system according to claim 3 wherein the track's element comprises:

a split aluminum tube.

5. The system according to claim 3 wherein the dolly's wheels comprise:

wheels of elastomeric compound spanning, and riding upon, opposite side edges of the element.

6. The system according to claim 1 wherein the track comprises:

track segments pieced together so that two upward-extending spaced-parallel lips of one segment abut tightly and contiguously to two upward-extending spaced-parallel lips of another segment, there being no appreciable crack nor any discontinuity in line and in level between abutting lips of successive segments.

7. The system according to claim 6 wherein the track further comprises:

connection members extending between, piecing together, and connecting adjacent track segments at, and between, a downward-extending region of each segment and of the track, these connection members not extending into the region of the upward-extending spaced-parallel lips of the segments and of the track.

8. The system according to claim 6 wherein at least one spaced-parallel pair of the track segments is straight.

9. The system according to claim 6 wherein at least one spaced-parallel pair of the track segments is curved.

10. The system according to claim 6 wherein successive track segments collectively form an arc of a circle.

11. The system according to claim 1 wherein the track is supportable for use so low as six inches above the earth or greater.

12. The system according to claim 1

wherein a center of gravity of the camera is within six inches of an imaginary plane between the lips of the two rails of the track;

wherein any sway in elevation angle of the camera during spatial movement of the camera along the track is reduced in accordance that a moment arm of the camera about either rail of the

track is short.

13. The system according to claim 12 wherein the dolly comprises:

a stanchion upon which is variably mounted and secured the camera so that a center of gravity of the camera is situated midway between the two spaced-parallel rails of the track.

14. The system according to claim 12 wherein the dolly comprises:

a motor for driving the dolly along the track.

15. A system for moving a camera in space along a straight line at fixedly predetermined elevational and azimuthal angles relative to this straight line, the system during all conditions of use to spatially move the camera comprising:

a track having two rails extending along an imaginary X axis direction which rails are straight to better than plus or minus one degree;

a plurality of members between the rails of the track along an imaginary Y axis which members hold the straight rails (i) at less than one percent deviation in distance of separation in the Y axis direction everywhere so that, at this distance of separation, (ii) the rails are everywhere spaced-parallel to within one degree;

a mechanism for adjusting the height above the surface of the earth of the track and its rails along an imaginary Z axis so that a plane of the rails is everywhere level to within one degree;

a dolly, having wheels both (i) fixed in separation at better than one percent accuracy wheel-to-wheel measured along the imaginary Y axis direction transversely across the track and (ii) of the same height to better than one percent, of both wheel-to-wheel separation and height so as to ride level within one degree of angle upon its equal-height wheels upon the evenly-spaced-parallel rails of the level track, the dolly mounting a camera at a fixedly predetermined position having less than one percent deviation in each of positions relative to the dolly along the

imaginary X and Y axis directions, and having an elevation constant to within one percent along the imaginary Z axis direction, and having less than one degree variation in azimuthal and in elevational angles relative to the dolly;

wherein the dolly so mounts the camera at a moment arm in elevation relative to the track which moment arm is so short so that any variations relative to level of the dolly, which variations are themselves relative to any variation in level of the plane of the rails, produce less than one degree variation in both elevational and azimuthal angles of the camera relative to the straight line of the track.

16. The system according to claim 15 wherein the track comprises:

two spaced-parallel rails each rail having two upward-extending spaced-parallel lips; and

wherein the wheels of the dolly contact, and ride upon, only upward-extending spaced-parallel lips of the rails.

17. The system according to claim 16 wherein the track comprises:

a substantially planar elongate element shaped in the substantial contour of an external surface of one-half of an elongate prism, opposite side edges of the element transverse to its elongate axis constituting the upward-extending spaced-parallel lips.

18. The system according to claim 17 wherein the track's element comprises:

one-half of a tube, being a substantially planar elongate sheet shaped in the substantial contour of the external surface of one-half of an elongate cylinder.

19. The system according to claim 18 wherein the track's element comprises:

split aluminum tube.

20. The system according to claim 16 wherein the dolly's wheels comprise:

wheels of elastomeric compound spanning, and riding upon, opposite side edges of the element.

21. The system according to claim 16 wherein the dolly comprises:

a motor driving the dolly's wheels to propel the dolly along the track.

22. The system according to claim 16 wherein the track comprises:

track segments pieced together so that there is no appreciable crack nor any discontinuity in line and in level between abutting lips of successive segments.

23. A method of moving a camera in space comprising:

adjusting level above the surface of the earth a track having two spaced-parallel rails each rail having two upward-extending spaced-parallel lips; and

mounting a camera to a dolly riding upon both rails of the track, the dolly having wheels that contact only, and that ride upon, the upward-extending spaced-parallel lips of the rails.

24. The method according to claim 23 further comprising:

segmenting the track into track segments for transport and storage; while

piecing together the track segments during use for moving the camera in space so that two upward-extending spaced-parallel lips of one segment abut tightly and continuously to two upward-extending spaced-parallel lips of another segment, there being no appreciable crack nor any discontinuity in line and in level between abutting lips of successive segments.

25. The method according to claim 24 wherein the piecing together of the track segments comprises:

connecting track segments with and by members extending between, and connecting, adjacent track segments at, and between, a downward-extending region of each segment and of the track so that these connection members do not extend into the region of the upward-extending spaced-parallel lips of the segments and of the track.

26. The method according to claim 23 further comprising:

locating a center of gravity of the camera is within six inches of a plane between the lips of the two rails of the track;

wherein any sway in elevation angle of the camera during spatial movement of the camera along the track is reduced in accordance that a moment arm of the camera about either rail of the track is short.

27. The method according to claim 23 wherein the adjusting level of the track above the surface of the earth comprises:

adjusting the extension of a multiplicity of variably extending stanchions upon which supported the track above the surface of the earth.